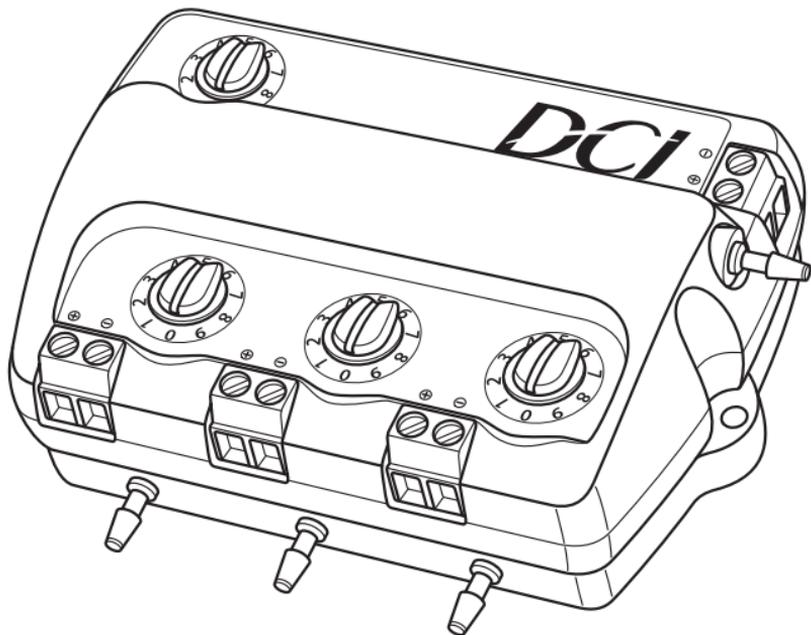


MULTIPOSITION POWER OPTICS SOURCE

Installation & Operating Instructions

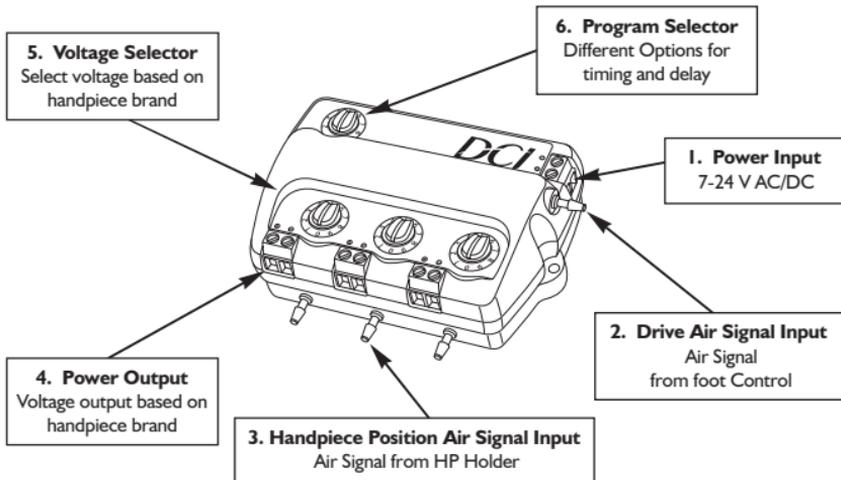
DCI

DCI MULTIPosition POWER OPTICS SOURCE



PRODUCT DESCRIPTION

The MPPOS light system is capable of providing power for up to 3 dental handpiece positions. The system is designed to be installed into the dental unit to provide a clean, aesthetic visual appearance. For this reason, it is highly recommended that a qualified service technician be consulted for proper installation of this product.



TECHNICAL DATA

Power Input:	7 – 24Vac/dc
Power consumption	1.2A
Classification	Protection against Electric Shock is achieved by Class II construction.
Transport & storage	Temperature: -35 to +50°C /-31 to +122°F Humidity: 5 to 85% RH (Avoid freezing and condensation).
Power adapter	Only use an NRTL listed power supply evaluated to the Medical Safety Standard UL/CSA 60601-1.
Air inputs	Do not exceed 90 PSI
Power output	2.6 – 5.5 Vdc (Selectable), 1.2A Max
Service	This product does not require cleaning or service, doing so will void warranty.

VOLTAGE SETTING DETAILS

Carefully review the handpiece manufacturers recommended voltage requirement and set the power optics system to the correct voltage setting.

Setting	Voltage	Setting	Voltage
0	0.00	5	3.30
1	2.60	6	3.50
2	2.90	7	3.75
3	3.00	8	4.15
4	3.10	9	5.50

Note: Voltage output values in the table are when the system is under load using 7" handpiece tubing. Voltage with no load is approximately .15V higher.

PROGRAMING/PLUMBING EXPLANATION

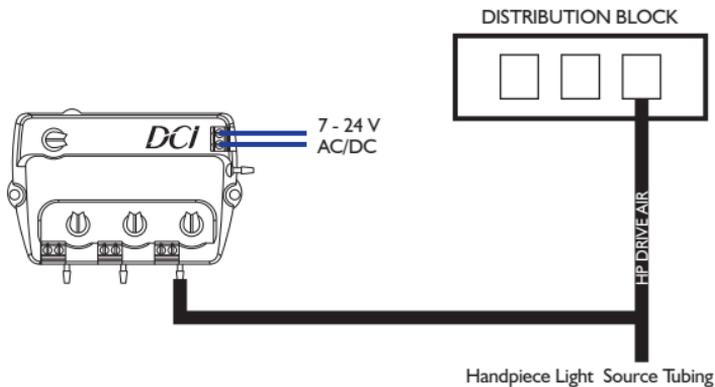
HOLDBACK PRESSURE DROPPING - SYSTEM ACTIVATES WHEN HANDPIECE IS PICKED UP AND PRESSURE RELIEVES. Examples would be - A-dec®, Belmont, DCI, Engle, Forest, Marus, Pelton & Crane, delivery systems or any that utilizes normally closed handpiece holders.			
Setting	Function	Function Description	PLUMBING CONFIGURATION
0	Pick Up On	Light turns on as soon as the handpiece is picked up and turns off when handpiece is placed back in the holder.	Hold back pressure from handpiece to be used and an air electric switch to shutoff power to system when unit is turned off.
1	Pick Up On + 7s Delay + Repeat	Light turns on when handpiece is picked up, has a delay of 7 seconds then turns off. Cycle repeats by operating the handpiece.	Hold back pressure from handpiece to be used and air signal to the Main Air Signal Input from the air gauge drive air pressure. UNUSED HANDPIECE POSITIONS MUST BE SET TO ZERO
2	Pick up Off + 20s Delay + Repeat	Light turns on when handpiece is operated, has a delay of 20 seconds then turns off. Cycle repeats by operating the handpiece.	
3	Pick Up Off + 7s Delay + Repeat	Light turns on when handpiece is operated, has a delay of 7 seconds then turns off. Cycle repeats by operating the handpiece.	
8	Scaler Function	The signal will only stay on when the instrument is selected and foot control is activated, no delay.	

PRESSURE RISING – SYSTEM ACTIVATES WHEN HANDPIECE IS PICKED UP AND PRESSURE BUILDS. Examples would be - Proma delivery systems.			
4	Pick Up On	Light turns on as soon as the handpiece is picked up and turns off when handpiece is placed back in the holder.	Air signal from handpiece holder.
5	Pick Up On + 7s Delay + Repeat	Light turns on when handpiece is picked up, has a delay of 7 seconds then turns off. Cycle repeats by operating the handpiece.	Air signal from handpiece to be used and air signal to Main Air Signal Input from foot control drive air pressure. UNUSED HANDPIECE POSITIONS MUST BE SET TO ZERO
6	Pick Off + 20s Delay + Repeat	Light turns on when handpiece is operated, has a delay of 20 seconds then turns off. Cycle repeats by operating the handpiece.	
7	Pick Up Off + 7s Delay + Repeat	Light turns on when handpiece is operated, has a delay of 7 seconds then turns off. Cycle repeats by operating the handpiece.	
9	Standard + 7s Delay	Light turns on when handpiece is operated, has a delay of 7 seconds then turns off. Cycle repeats by operating handpiece.	

The DCI 3 Position Deluxe Power Pack is preset to operate like any standard power optics light source system. The preset output voltage is 3.3 VDC (Setting #5) and the system is programmed to provide light when the foot control is activated. Program setting #9.

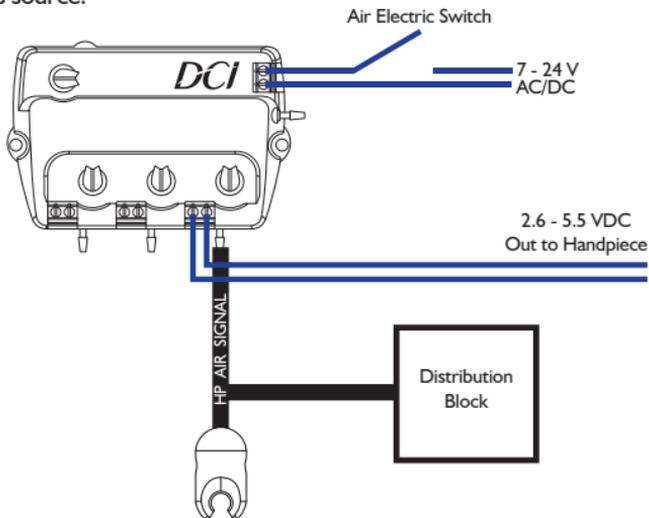
For a new installation:

1. Turn the dental unit OFF and disconnect power.
2. Install a 1/8" X 1/8" X 1/16" tee fitting in the drive air line on the desired handpiece tubing.
3. Attach 1/8" tubing from the tee fitting to the proper handpiece position air signal input on the power optics source.
4. Install light source wiring to power pack.
5. Complete steps 2 & 3 with the remaining handpiece positions as necessary.
6. Set the voltage setting knob to 0 for unused handpiece positions.
7. Attach input power wires to the power optics source.
8. Turn the dental unit on and verify your new installation operates properly. Ensure a handpiece is installed to create back pressure to operate the power optics source.



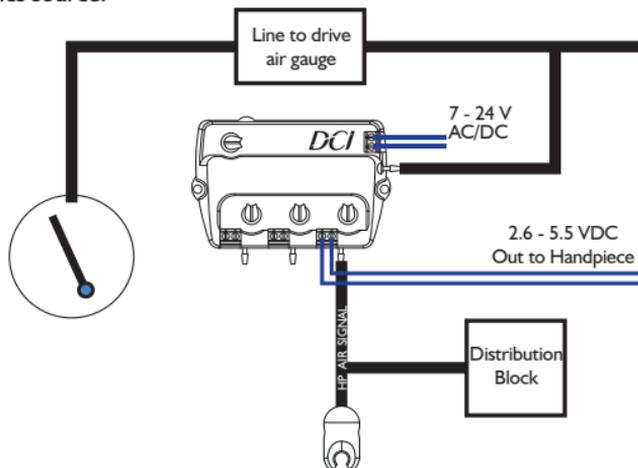
Installation instructions for program setting #0

1. Turn the dental unit OFF and disconnect power. Select the appropriate voltage setting based on the handpiece model.
2. Install a 1/16" X 1/16" X 1/16" tee in the air signal line that goes from the holder to the control block.
3. Attach a 1/8" tubing from the tee fitting to the proper **Handpiece Position Air Signal Inputs** on the power pack.
4. Install light source wiring to power pack.
5. Complete steps 2 & 3 with the remaining handpiece positions as necessary. Set the voltage setting knob to 0 for the handpiece positions that are not to be used to ensure they are not active.
6. Install an air electric switch in series to one of the transformer wires and attach wires to power source.
7. Turn the dental unit on and verify your new installation operates properly. Ensure a handpiece is installed to create back pressure to operate the power optics source.



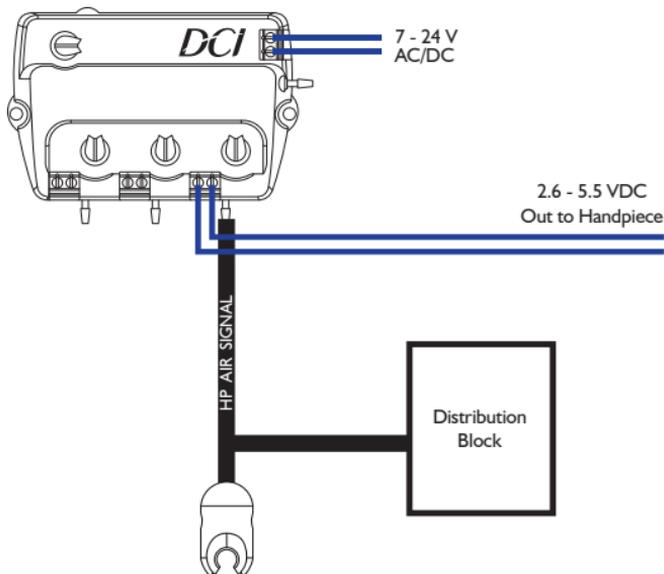
Installation instructions for program settings #1, #2, #3, #8

1. Turn the dental unit OFF and disconnect power.
2. Select the appropriate voltage setting based on the handpiece model.
3. Install a 1/16" X 1/16" X 1/16" tee in the air line that goes from the holders to the control block.
4. Attach a 1/8" tubing from the tee fitting to the proper **Handpiece Position Air Signal Inputs** on the power pack.
5. Install a 1/16" X 1/16" X 1/16" tee in the drive air gauge line.
6. Attach a 1/8" tubing to the tee and then connect to the **Drive Air Supply Input**.
7. Install light source wiring to power pack.
8. Complete steps 4 & 5 with the remaining handpiece positions as necessary. Set the voltage setting knob to 0 for the handpiece positions that are not to be used to ensure they are not active.
9. Attach input power wires to the power optics source.
10. Turn the dental unit on and verify your new installation operates properly. Ensure a handpiece is installed to create back pressure to operate the power optics source.



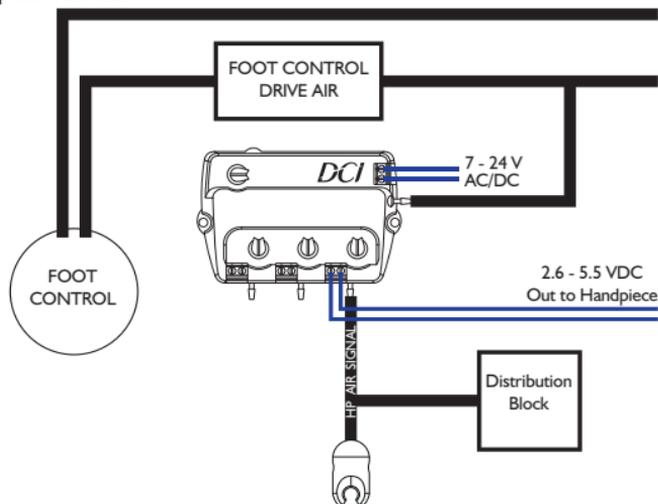
Installation instructions for program settings #4

1. Turn the dental unit OFF and disconnect power.
2. Select the appropriate voltage setting based on the handpiece model.
3. Install a 1/16" X 1/16" X 1/16" tee in the air line that goes from the holder to the control block.
4. Install light source wiring to power pack.
5. Attach a 1/8" tubing from the tee fitting to the proper **Handpiece Position Air Signal Inputs** on the power pack.
6. Complete steps 2 & 3 with the remaining handpiece positions as necessary. Set the voltage setting knob to 0 for unused handpiece positions.
7. Turn the dental unit on and verify your new installation operates properly. Ensure a handpiece is installed to create back pressure to operate the power optics source.



Installation instructions for program settings #5, #6, #7

1. Turn the dental unit OFF and disconnect power.
2. Install a 1/16" X 1/16" X 1/16" tee fitting in the line that goes from the holder to the control block.
3. Attach 1/8" tubing from the tee fitting to the proper handpiece position air signal input on the power optics source.
4. Install a 1/8" X 1/8" X 1/16" tee in the foot control drive air line.
5. Attach a 1/8" tubing to the tee and then connect to the **Main Air Signal Input**.
6. Install light source wiring to power pack.
7. Complete steps 2 & 3 with the remaining handpiece positions as necessary. Set the voltage setting knob to position 0 for unused handpiece positions.
8. Attach input power wires to the power optics source.
9. Turn the dental unit on and verify your new installation operates properly. Ensure a handpiece is installed to create back pressure to operate the power optics source.



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